

## DOCUMENT RESUME

ED 124 578

TM 005 333

AUTHOR Lucco, Robert J.  
TITLE Conceptualizing Evaluation Strategy: An Evaluation Systems Framework.  
PUB. DATE [Apr 76]  
NOTE 13p.; Paper presented at the Annual Meeting of the American Educational Research Association (60th, San Francisco, California, April 19-23, 1976)  
EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.  
DESCRIPTORS \*Evaluation Methods; Guidelines; \*Models; Planning; \*Program Evaluation; School Districts  
IDENTIFIERS Evaluation Systems Framework; Virginia (Virginia Beach); Virginia Beach City Public Schools

## ABSTRACT

Existing evaluation models have been examined and found wanting with respect to planning comprehensive evaluation strategy. In seeking a more coherent conceptual framework from which to design evaluation strategy, the Virginia Beach City Public Schools developed an evaluation Systems Framework. The framework represents a conceptual scheme which allows the local educational agency to delineate evaluation scope, define evaluator roles, and design evaluation procedures. (Author)

\*\*\*\*\*  
\* Documents acquired by ERIC include many informal unpublished \*  
\* materials not available from other sources. ERIC makes every effort \*  
\* to obtain the best copy available. Nevertheless, items of marginal \*  
\* reproducibility are often encountered and this affects the quality \*  
\* of the microfiche and hardcopy reproductions ERIC makes available \*  
\* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
\* responsible for the quality of the original document. Reproductions \*  
\* supplied by EDRS are the best that can be made from the original. \*  
\*\*\*\*\*

## CONCEPTUALIZING EVALUATION STRATEGY: AN EVALUATION SYSTEMS FRAMEWORK

ROBERT J. LUCCO  
Virginia Beach City Public Schools

### INTRODUCTION

The restructuring of public confidence and support figures to be the most critical challenge facing our nation's schools during the last quarter of the 20th century. Amid charges of inequality, inefficiency and irrelevance; accountability emerged as an issue of national importance during the previous decade. More recently, congressional changes in the Elementary and Secondary Education Act of 1965 have mandated the evaluation of federally sponsored educational programs. Responding to these public pressures and legislative demands, two significant factors have been observed with respect to the field of evaluation. First, school divisions throughout the country have attempted to establish or expand evaluation capabilities. Second, a proliferation of evaluation models have been generated (Worthen, 1968; Anderson, 1973; Carter, 1975). Yet, questions arise as to whether excessive demands have far exceeded theoretical developments in the field. In an attempt to address these issues from a practitioners perspective, a structural framework has been suggested to aid the Local Educational Agency in the conceptualization of evaluation strategies.

### THE NEED FOR A CONCEPTUAL FRAMEWORK

One of the principle problems confronting the school division which plans to develop or expand its evaluation capabilities, is the lack of a conceptual framework from which to define evaluation function and evaluator roles. Often the evaluation theorist serves only to confuse rather than

clarify evaluator roles in his efforts to define the parameters of this newly emerging field. Evaluation, we are told, by nature involves the formulation of judgments concerning the worth of educational phenomena, and therefore the evaluator's principle function is that of valuing (Popham, 1975). While few would dispute the fact that evaluation necessitates the weighing of merit, it may prove presumptuous to assume that such responsibility rests solely with the evaluation practitioner. The evaluator functioning within the LEA often finds that such decisions are reserved for the administrative hierarchy. And, at this level, substantive evaluation (i.e., empirical evidence) only constitutes one criterion upon which judgments of worth are made. As House (1973) suggests factors such as timeliness, pervasiveness, political pressure, and public opinion surface to influence the decision process.

The evaluator, as Airasian (1974) observes, can exert little control over the motives or attitudes of his superiors; nor can he dictate to what extent his data will ultimately influence the decision-making process. All he can attempt is to provide the least ambiguous and most accurate information regarding decision alternatives. However, decision-makers must delineate the scope and function of the evaluation effort prior to the identification of evaluator roles and the securing of relevant data. It is in this regard that we have labored to define an Evaluation Systems Framework (ESF).

Models designed to expedite the practice of evaluation abound. However, while varying to a degree in approach, most models appear markedly

alike with respect to their pronounced preoccupation with the scrutinizing of program process. While process plays a significant role with respect to systems theory, the decided emphasis placed on program operation leads one to suspect the political underpinnings of many current evaluation models. Existing evaluation models may prove useful for the monitoring of educational programs; but contribute little to the overall conceptualization of a comprehensive evaluation strategy, with the possible exception of Stufflebeam's Context-Input-Process-Product Model (Stufflebeam, 1971) or Alkin's CSE Model (Alkin, 1969; Alkin, 1974).

Productive evaluation at the local level rests with the ability of the LEA to effect the following items: delineate evaluation scope; define evaluator roles; and describe evaluation functions. In most instances, it proves counterproductive to enlist the services of a model without first having the benefit of a well-defined structural framework. The failure of existing models to deal adequately with these and other related structural questions contributes to the restrictive nature of current evaluation theory. Again from the practitioners perspective, program evaluation must seek the continuity of a total assessment (i.e., from inception to termination), and attempt to relate findings to the larger social and educational context in order to be of value to the educational decision-maker. Therefore, it behooves those of us in the field to seek new conceptual frameworks from which to proceed.

## TOWARDS A TOTAL EVALUATION STRATEGY

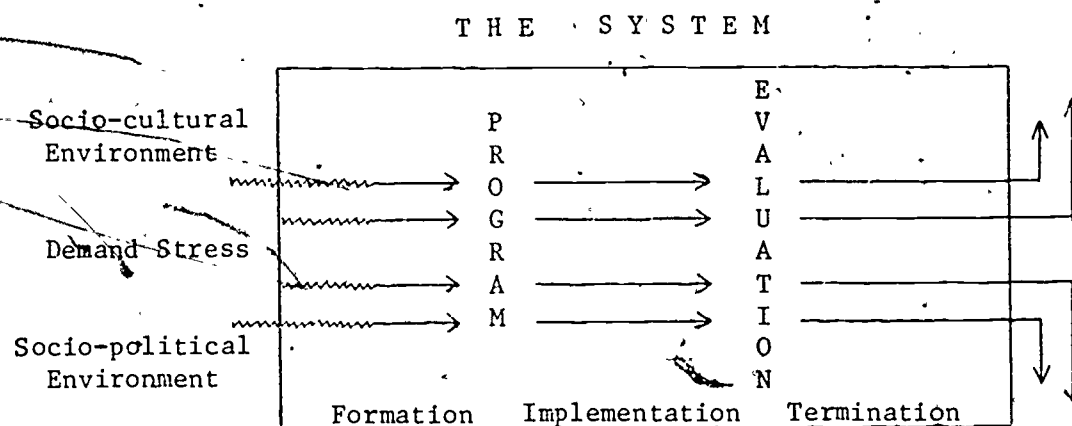
Seeking to provide a more comprehensive conceptual framework from which to design evaluation strategy, the Virginia Beach City Public Schools has developed the ESF. In an effort to dispel any misconception at the onset, it may prove useful to delineate precisely what the ESF is and what it is not. It is not an evaluation model, for it was designed to play a more structural rather than technical role (i.e., a system for generating strategy). The ESF is, however, a conceptual scheme which allows the local educational agency to define evaluation scope, identify evaluation staff, and design evaluation procedures.

For our purposes, the LEA has been defined as a system functioning within a socio-cultural/socio-political environment (see Figure I). The system, as Easton (1965) has suggested, continually experiences "demand stress" which may be generated from internal or external sources. Once these demands gain recognition within the system, programs are usually designed to address specific needs. These programs characteristically progress through three phases, formation, implementation and termination, which coincidentally parallel the input-process-output systems format. Associated with each of these three pragmatic phases are certain evaluation functions and related evaluator roles which must be identified prior to the planning of evaluation strategy. Despite current practice, attempts to assess the total impact of a program upon the system must involve an

examination of all three phases.

FIGURE I

The Life Cycle of an Educational  
Program: A Conceptual Model



Managing Stress

The first and perhaps most legitimate concern with respect to planning evaluation strategy, involves an assessment of stress factors which give rise to new educational programs or practices (see Figure I). The importance of this stage of the evaluation is underscored by two primary factors. First, the program at this phase is most directly associated with the underlying purpose of the system. Second, developments at this phase influence the form and delivery of the program in subsequent phases. Thus, the management of stress becomes the focus of the first component in our framework.

The evaluator's role in this formative phase is that of program coordinator, for he must serve as liaison between program developers and evaluators (see Figure II). The evaluator, at this juncture, must generate information which will aid in the analysis of stress factors and their related

need requirements. The data collected within this phase should contribute to a broader understanding of program goals, while providing a basis for planning future evaluation strategy.

Characteristically, this component or phase of the evaluation involves the following items:

- 1) gaining a familiarity with the phenomenon in question.
- 2) providing a census of problems regarded as relevant by people working in the area of concern.
- 3) clarifying concepts and relationships between variables.
- 4) establishing criteria for future evaluation efforts.

The major concern at this stage of the evaluation is the clarification of stress factors for goal setting purposes. As the initially vaguely defined problem becomes transformed into one with more precise meaning, numerous adjustments may be needed with respect to the formulation of program goals and evaluation design.

The evaluator's orientation during this initial phase must be one of alert receptivity, of seeking rather than testing. He can anticipate that his design will be subject to frequent revision as new information is generated. Changes may become necessary in both the amount and type of data required.

Data gathering procedures may include unobtrusive methods such as participant observation, documents research, and anecdotal records (Brandt, 1972; Webb et al., 1966), as well as, more reactive techniques such as interviews and questionnaires. Again, these procedures are subject to vary as the problem becomes more clearly defined.

### Monitoring Progress

The second element of the framework focuses on the monitoring of program progress (see Figure II). Assessment at this phase of program operation has been variously termed formative or process evaluation. Evaluation at this level may or may not serve as a basis for program modification, depending upon the requirements placed on administrative decisions. However, evaluation strategy at this stage must concern itself with the re-examination and clarification of program objectives. Therefore, whether or not program monitoring serves a developmental function, it most always serves a descriptive function (i.e., supplying information concerning program implementation).

The evaluator's role is now defined as that of program manager. The program manager's principal purpose is to ensure that discrepancy between initial intent and current operations does not impede program effectiveness. He must be in a position to deal with the following questions.

- 1) Has program philosophy changed?
- 2) Have program objectives shifted?
- 3) Need staff roles be redefined?

Research procedures appropriate for the evaluation at this phase include such techniques as logical analysis, content analysis, and critical incident. Both reactive and nonreactive measures may be employed for the purposes of data gathering. In addition, any one of several evaluation models (e.g., Tripodi's Differential Evaluation Model, or Provus' Discrepancy Evaluation Model) may be applied to lend added structure to the assessment of



program progress.

### Measuring Product

The final component of the evaluation framework necessitates the quantitative analysis of program products. The significance of this phase of the evaluation lies with the grounding of administrative judgment in empirical evidence. Summative or product evaluation provides the decision-maker with the hard data necessary for assessing overall program effectiveness.

Product evaluation involves the formal assessment of program criterion or output. Generally, program outcomes are measured and assessed through the use of a comparison group(s). In cases where multiple or control group designs are appropriate and feasible the evaluator may wish to consult Campbell and Stanley's (1963) classical treatment of experimental design or Popham's (1975) suggested adaptations for the field of evaluation.

However, in other cases, designs employing multiple groups may prove inappropriate and/or impractical. Under these circumstances it may be desirable to compare program outcomes against an arbitrary standard, defined earlier during the initial phase of program development. Horst, et al. (1975) suggest the use of a "Norm-referenced" evaluation design when comparison groups are unavailable.

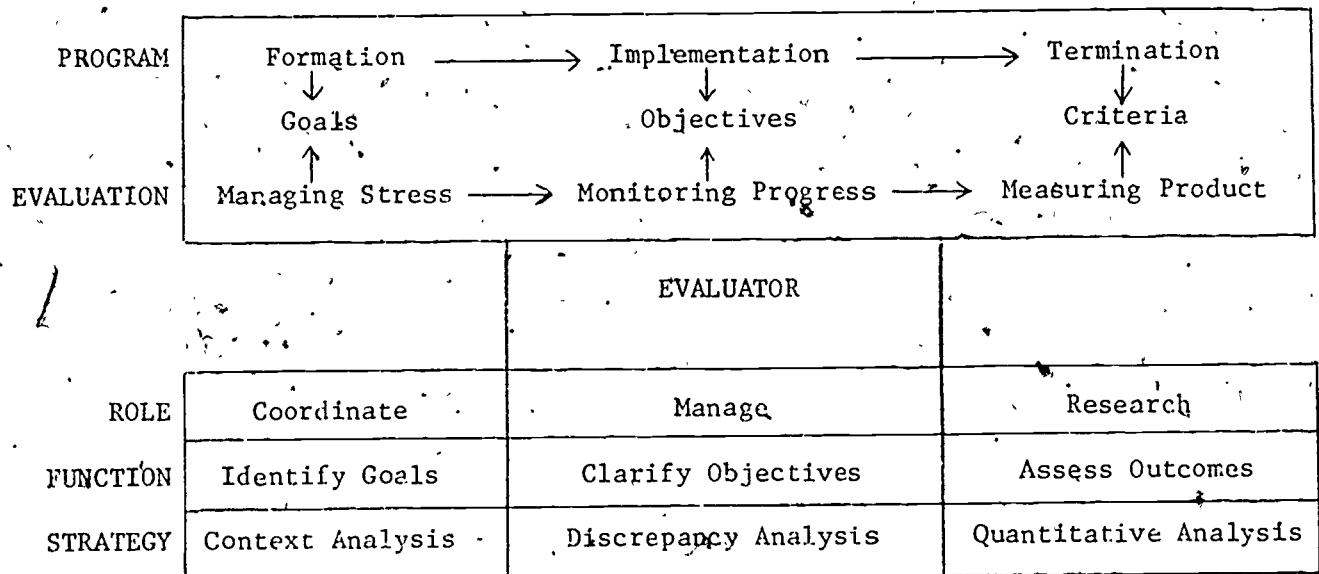
Regardless whether or not control group designs are employed, the primary function of this phase of the evaluation remains that of providing the decision-maker with empirical evidence concerning the realization of

program goals. Due to these information requirements the evaluator must possess research competencies in the areas of experimental design and quantitative analyses (see Figure II).

Although the importance of quantitative assessment has been underscored in this section, desired program outcomes are often of such a complex nature that they cannot be properly measured or inferred by means of a single criterion, as Moursund (1973) has noted. In this event, a broader data base may be necessary in order to accurately describe program benefits. Informal interviews and observations, project records and unsolicited comments may provide alternate sources of information concerning the effects of program outcomes (Zelditch, 1972).

FIGURE II

An Evaluation Systems Framework:  
For Conceptualizing Evaluation Strategy



#### A FINAL WORD

What we have attempted to provide in the above discussion is a conceptual framework within which evaluation scope and function, including evaluator roles, can be identified. We hope that through the use of such a framework administrators, as well as evaluators, will be in a better position to plan more comprehensive evaluations. Evaluations which will yield more meaningful and useful information for channeling into the decision process.

Two observations should perhaps be noted in closing. First, the logical ordering of the framework's components (i.e., paralleling programmatic phases), does not necessarily imply a temporal ordering. Indeed, design and analysis considerations have been known to surface early during the formulative stages of program planning. And second, any one or all of the evaluator roles described above may be occupied by one or more individuals.

## REFERENCES

- Airasian, P. W. "Designing Summative Evaluation Studies." In W. J. Popham (Ed.), Evaluation in Education: Current Applications. Berkeley, Calif.: McCutchan, 1974.
- Alkin, M. C. "Evaluation Theory Development." Evaluation Comment. II (1), 1969.
- Alkin, M. C. "An Introduction to the Center." Los Angeles: Center for the Study of Evaluation, University of California, January, 1974.
- Anderson, S. B. et al. Encyclopedia of Educational Evaluation. San Francisco: Jossey-Bass, 1973.
- Brandt, R. M. Studying Behavior in Natural Settings. New York: Holt, Rinehart & Winston, 1972.
- Campbell, D. T. and Stanley, J. T. "Experimental & Quasi-experimental Designs for Research on Teaching." In N. L. Gage (Ed.), Handbook of Research on Teaching. Chicago: Rand McNally, 1963.
- Carter, W. E. "A Taxonomy of Evaluation Models: Use of Evaluation Models in Program Evaluation." A paper presented at the AERA Annual Meeting, Washington, D.C., April, 1975.
- Easton, D. A Framework for Political Analysis. Englewood Cliffs, N. J.: Prentice-Hall, 1965.
- Horst, D. P. et al. "Practical Guide to Measuring Project Impact on Student Achievement." Monograph Series on Evaluation in Education No. 1. Los Altos, Calif.: RMC Research Corp., 1975. (Microfiche ERIC ED 106 376)
- House, E. R. School Evaluation: The Politics and Process. Berkeley, Calif.: McCutchan, 1973.
- Moursund, J. P. Evaluation: An Introduction to Research Design. Monterey, Calif.: Brooks/Cole, 1973.
- Popham, W. J. Educational Evaluation. Englewood Cliffs, N.J.: Prentice-Hall, 1975.
- Provus, M. Discrepancy Evaluation. Berkeley, California: McCutchan, 1971.
- Stufflebeam, D. L. et al. Educational Evaluation and Decision-Making. Itasca, Illinois: Peacock, 1971.

Tripodi, T. et al. Social Program Evaluation: Guidelines for Health, Education, and Welfare Administration. Itasca, Illinois: F. E. Peacock, 1971.

Webb, E. J. et al. Unobtrusive Measures: Nonreactive Research in the Social Sciences. Chicago: Rand McNally, 1966.

Worthen, B. R. "Toward a Taxonomy of Evaluation Designs," Educational Technology, VIII, August, 1968.

Zelditch, M., Jr., "Some Methodological Problems of Field Studies," American Journal of Sociology, 1962, 67, 566-576.